

APPENDIX J
VISUAL IMPACT RATING FORMS



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 01	Latitude / Longitude 21.6478 , -157.9290	Location Laie Hawii Temple
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Clear and Clean Prominent water Flat landform in the foreground Rolling to rugged landform in the background	Jagged domed and flat vegetation in the foreground Rolling vegetation in the background	Bold and rectangular buildings and staircases
LINE	Horizontal smooth (reflecting pool) and vertical geometric (fountain) water Horizontal landform - foreground Curving mountains - background	Flat lawn and shrubs. Regular to round shrubs and trees. Angular and irregular palm trees	Simple vertical columns and horizontal fountains
COLOR	cool blues reflection light to dark greens	light to dark greens grays browns reds	whites, grays, tans
TEXTURE	smooth and glossy (reflecting pool) medium directional (fountain) gradational landform	smooth to rough	smooth

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?

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Yes

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No

IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	same as above
LINE	same as above	same as above	same as above
COLOR	same as above	same as above	same as above
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				✓				✓				✓
	LINE				✓				✓				✓
	COLOR				✓				✓				✓
	TEXTURE				✓				✓				✓

OVERALL LEVEL OF CONTRAST: None

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	Viewer Use	OVERALL Response
High	Moderate	High	High
ADDITIONAL COMMENTS The Project is 1.7 Miles from the Viewpoint 01. Project would be partially to fully screened by vegetation, but could potentially see turbines but would not draw attention.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 02	Latitude / Longitude 21.63920000000, -157.9200000000	Location Polynesian Cultural Center
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat	Rounded and irregular	Flat, blocky parking lot, regular square building
LINE	Horizontal	Angular and smooth	Horizontal parking lot and curbs and vertical light poles and fencing.
COLOR	Browns	Light to dark greens Browns Tans	dark to light grays, tans, whites blues
TEXTURE	Smooth	Smooth to rough	smooth

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?

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Yes

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No

If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	same as above
LINE	same as above	same as above	same as above
COLOR	same as above	same as above	same as above
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: none

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	Use Volume	OVERALL Response
High	Moderate	High	Moderate
ADDITIONAL COMMENTS Enclosed landscape. Project is 2.5 miles from Viewpoint 02. Project would be screened by vegetation, but may potentially see turbine blades through trees.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 5 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 03	Latitude / Longitude 21.6062, -157.9040	Location LDS Church
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Prominent flat ocean Flat beach Rugged mountains, rolling to flat land	Rounded and irregular	Flat and curving road Boxy building
LINE	Horizontal ocean Flat beach Rugged mountains in middle ground Rolling to flat hills in background	Bold and rugged to parallel	Horizontal and curving conductor lines Bold building Vertical poles, fencing
COLOR	Cool to medium Blues Tans, Browns,	Light to dark greens Browns Tans Reds	Browns, blacks, grays, tans, yellow
TEXTURE	Smooth water Stippled beach and landform - foreground Medium middle ground Striated background	Medium and gradational	smooth and directional

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED FOR KOP? ☐ Yes ☒ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	same as above
LINE	same as above	same as above	same as above
COLOR	same as above	same as above	same as above
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: None

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	Use Volume	OVERALL Response
Moderate	Moderate	Moderate	Moderate
ADDITIONAL COMMENTS Project is 5 miles from Church. May see the tips of the turbine blades behind terrain. But likely is low.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 04	Latitude / Longitude 21.6757, -157.9580	Location Kahuku Community
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat in foreground to rugged in background	Flat and rolling Angular and rugged	Rectangular boxy homes Vertical poles and fences Diagonal and curving conductor lines. Few turbines
LINE	Horizontal to undulating	Horizontal and vertical rugged and jagged	Bold, geometric Vertical converging and diverging
COLOR	Browns	light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, pinks, tans. Grays and blacks Whites
TEXTURE	Smooth to medium	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?

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Yes

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No

IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	Same as above	Additional Turbines
LINE	same as above	Same as above	Additional Vertical wind turbines
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Moderate	High	High
ADDITIONAL COMMENTS The project is 0.6 miles from residential community.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 5, 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 05	Latitude / Longitude 21.6756, -157.958	Location Kahuku Sugar Mill Historical Site
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat in foreground to rugged in middle ground. Rolling Background	Flat and rolling Angular and rugged	Rectangular buildings, curving roads. Vertical poles and signs Diagonal and curving conductor lines. Few turbines
LINE	Horizontal to undulating	Horizontal and vertical and wispy rounded, rugged and jagged	Bold, geometric, and horizontal Vertical Curving lines
COLOR	Browns	light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans dark Grays and blacks oranges reds Whites
TEXTURE	Smooth to medium	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?

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Yes

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No

IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Additional Turbines
LINE	same as above	same as above	Additional vertical wind turbines
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

<u>Viewer Sensitivity</u>	<u>DURATION OF VIEW</u>	<u>User Volume</u>	<u>OVERALL Response</u>
Moderate	Moderate	High	Moderate
ADDITIONAL COMMENTS Tourists and residents use the area. Project is 0.6 miles from Project.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 5 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 06(SIM)	Latitude / Longitude 21.6756, -157.958	Location Kahuku Community Center
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat in foreground to rolling in middle ground and background	Flat and rolling Angular and rugged	Rectangular buildings Vertical poles and fences. Diagonal and curving conductor lines. Few turbines
LINE	Horizontal to undulating	Horizontal rounded, rugged and jagged	Bold, geometric, and horizontal Vertical Curving lines
COLOR	Browns	light greens to dark greens Yellows, grays, browns	Browns, greens, tans, beiges light grays, browns Whites
TEXTURE	Smooth to medium	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?



Yes



No

If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Additional wind turbines
LINE	same as above	same as above	Additional vertical wind turbines
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
	FORM				✓				✓	✓			
	LINE				✓				✓	✓			
	COLOR				✓				✓			✓	
	TEXTURE				✓				✓				✓

OVERALL LEVEL OF CONTRAST: Moderate

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High (Residential)	Moderate	Short	Moderate
ADDITIONAL COMMENTS Project is 0.5 miles from viewpoint 06. Scenic quality is moderate,			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 2, 2013 Evaluated - May 5 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 07	Latitude / Longitude 21.6756, -157.958	Location Malaekahana State Recreation Area
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat in foreground to rolling in middle ground and rugged background background	Flat and rounded to rolling rugged	Distant geometric buildings and turbine blades Vertical poles and fences. Curving conductor lines and roads.
LINE	Horizontal to undulating	Horizontal rounded, rugged and jagged	Bold bands and curving conductors Vertical poles
COLOR	Browns	light greens to dark greens Yellows, grays, browns, tans	Browns, greens, tans, beiges light grays, browns Whites
TEXTURE	Smooth to medium	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?

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Yes

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No

If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Triangular turbine blades
LINE	same as above	same as above	Irregular turbine blades
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Moderate

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	Overall Response
High	Short	Moderate	Moderate
ADDITIONAL COMMENTS Views inside the park are completely screened by vegetation Viewpoint 07 is located at the entrance of the Park so users would be driving by and not stopping. Scenic quality is moderate. Project is 1.0 miles from viewpoint 07			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - April 22, 201 (KOP 25) Evaluated - May 5, 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 08	Latitude / Longitude 21.6937, -157.98	Location Kamehameha Highway
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat to rolling in middle ground. Rugged background	Flat and rounded Rolling and rugged	Curving road, horizontal fences, rectangular building, prominent vertical poles and non directional blades from wind turbines. Curving conductors
LINE	Horizontal and rounded to undulating	Horizontal and rounded Vertical, angular and wispy Rugged	Geometric, vertical, Turbines. horizontal, curving conductors
COLOR	Browns, tans and light greens	light greens to dark greens Yellows, grays, browns, tans, beiges	Whites, browns grays, blacks, tans, greens, reds yellows,
TEXTURE	Smooth to medium	smooth to coarse	Smooth to medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?

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Yes

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No

IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Additional vertical turbines
LINE	same as above	same as above	Additional turbines
COLOR	same as above	same as above	glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				✓				✓	✓			
	LINE				✓				✓	✓			
	COLOR				✓				✓	✓			
	TEXTURE				✓				✓				✓

OVERALL LEVEL OF CONTRAST: Moderate

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
Moderate	Short	High	Moderate
ADDITIONAL COMMENTS From highway. 0.6 Miles from the Project. Scenic Quality is Moderate.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - April 22, 2014 Evaluated - May 5 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 09	Latitude / Longitude 21.6763, -157.947	Location Kahuku Intermediate and High School
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat in foreground to rugged and rolling Background	Flat, vertical and rounded Rugged background	Rectangular buildings, curving roads. Vertical poles and signs Diagonal and curving conductor lines.
LINE	Horizontal to undulating	Horizontal and vertical and wispy Rolling	Bold, geometric, and horizontal Vertical Curving lines
COLOR	Browns	light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans dark Grays and blacks oranges reds Whites
TEXTURE	Smooth to medium	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Vertical and angular wind turbines
LINE	same as above	same as above	vertical wind turbines
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
Moderate	Short	High	Moderate
ADDITIONAL COMMENTS Scenic Quality is moderate. Project is 0.5 miles from School. Residents in school in classes and recreating on the fields			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 2, 2013 Evaluated - May 5, 2014	



Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 10	Latitude / Longitude 21.7022, -157.992	Location Turtle Bay Resort and Golf Course
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Wetland/Water - curving Flat to rolling foreground to rugged background	Flat and rolling to vertical and rounded Angular and rugged	Vertical wind turbines Curving paths rectangular buildings
LINE	undulating to rugged	Horizontal Vertical, rounded, rugged and jagged	Bold vertical and irregular curving Geometric
COLOR	Browns, oranges, sienna, and greens	light greens to dark greens Yellows, grays, browns	Whites, greys, tans
TEXTURE	Smooth to medium	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

Has PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Potentially angular and vertical
LINE	same as above	same as above	Potentially vertical and geometric
COLOR	same as above	same as above	Potentially glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Moderate	Moderate	Moderate
ADDITIONAL COMMENTS Project is 2.5 miles. There is an existing wind farm closer to viewer.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - April 23, 2013 Evaluated - May 5, 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 11	Latitude / Longitude 21.5771, -157.882	Location Punaluu Beach Park
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Prominent flat ocean Flat beach Rugged mountains, rolling to flat land	Irregular and rugged	Rectangular buildings Vertical poles
LINE	Horizontal ocean Flat beach Rugged mountains in middle ground Rolling to flat hills in background	Vertical and Rugged	Geometric and vertical
COLOR	Cool to medium and dark Blues with tans and whites Tans, Browns,	Light to dark greens, yellows Browns Tans	Tans, light grays, greens, browns
TEXTURE	Smooth water Stippled beach and landform - foreground Medium middle ground and background	Medium and gradational	smooth

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED ? ☐ Yes ☒ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	same as above
LINE	same as above	same as above	same as above
COLOR	same as above	same as above	same as above
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: none

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Short	Moderate	Moderate
ADDITIONAL COMMENTS Project is 7.5 miles from Beach. Maybe visible from the HWY. Viewer would be looking at ocean mostly likely not toward project.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 12	Latitude / Longitude 21.5569, -157.853	Location Kahama Valley State Park Beach
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Flat clear water Rocky and flat to rugged landform	Rugged to vertical	Distant geometric buildings
LINE	Horizontal Rugged	Undulating and vertical	Geometric
COLOR	Cool light blues to medium and dark blues Tans, blacks, browns, beiges and whites	Light to dark greens, tans, browns, yellows	whites
TEXTURE	Coarse to medium	Medium and rough	Scattered fine

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	same as above
LINE	same as above	same as above	same as above
COLOR	same as above	same as above	same as above
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
	FORM				✓				✓				✓
	LINE				✓				✓				✓
	COLOR				✓				✓				✓
	TEXTURE				✓				✓				✓

OVERALL LEVEL OF CONTRAST: none

Section E: Viewer Response

SCENIC QUALITY	DURATION OF VIEW	User Volume	OVERALL Response
High	Moderate	Moderate	Moderate
ADDITIONAL COMMENTS Project is 9.0 miles from Beach. Maybe visible from the HWY.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 5, 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 13	Latitude / Longitude 21.6839, -157.955	Location James Campbell NWR
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat in foreground to rolling in middle ground and rugged background	Flat and rolling Angular and rugged	Rectangular sign, scattered rectangular buildings Vertical poles, turbines, and horizontal fences. Diagonal and curving conductor lines.
LINE	Horizontal to undulating	Horizontal rounded, rugged and jagged	Geometric, and horizontal Bold Vertical Lines Curving lines
COLOR	Browns	light greens to dark greens Yellows, grays, browns	Browns, greens, tans, beiges light grays, browns Whites
TEXTURE	Smooth to medium	smooth to rough	Smooth and coarse

Section C: Proposed Activity Description

Has PHOTO SIMULATION BEEN CREATED? ☒ Yes ☐ No If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Same as above	Same as above	Additional Vertical and angular turbine blades
LINE	same as above	Same as above	Additional Vertical and angular wind turbines
COLOR	same as above	same as above	Whites and glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
	FORM				✓				✓	✓			
	LINE				✓				✓	✓			
	COLOR				✓				✓	✓			
	TEXTURE				✓				✓				✓

OVERALL LEVEL OF CONTRAST: Moderate

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Long	Low	Moderate
ADDITIONAL COMMENTS Proposed Project will co-dominate with existing wind project. Scenic Quality is high. Distance from Project is 1.0 miles			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 2, 2013 Evaluated - May 5 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 14	Latitude / Longitude 21.6027, -157.9050	Location North Windward Baptist Church
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Flat	Flat to rounded and angular	Rectangular building Vertical poles Curving conductors
LINE	Horizontal	Horizontal Undulating and jagged	Geometric, vertical and curving
COLOR	Tans, Browns,	Light to dark greens and yellows Browns Tans	Browns, grays, tans, whites
TEXTURE	Smooth to medium	Smooth to medium to coarse	smooth

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	same as above
LINE	same as above	same as above	same as above
COLOR	same as above	same as above	Same as above
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: None

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Moderate	Moderate	Moderate
ADDITIONAL COMMENTS Project is 5 miles from Church and the grounds are enclosed with vegetation. No views from Church or property.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 15	Latitude / Longitude 21.6489, -157.914	Location Coastal Residences
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Prominent flat ocean Flat beach Rugged hills	Irregular and rugged	Rectangular buildings Angular and irregular turbine blades
LINE	Horizontal undulating ocean Flat beach Rugged mountains in middle ground Rolling to flat hills in background	Vertical and Rugged	Geometric and vertical
COLOR	Cool to medium and dark Blues with tans and whites Beiges Tans, Browns,	Light to dark greens, yellows Browns Tans	Whites, Tans, light grays, greens, browns
TEXTURE	Smooth water Stippled beach and landform - foreground Medium middle ground and background	Medium and gradational	smooth

Section C: Proposed Activity Description

Has PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Additional turbines
LINE	same as above	same as above	Additional vertical and irregular turbines
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Long	High	High
ADDITIONAL COMMENTS Project is 2.5 miles from Laie Point where residences are located. Scenic quality is high.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 16	Latitude / Longitude 21.5569, -157.853	Location Swanzy Beach Park
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	Flat clear water Rocky and flat to rugged landform	Flat Vertical and rounded Rugged	Geometric buildings Curving path and wall
LINE	Horizontal Rugged	Horizontal Vertical Undulating	Geometric and curving
COLOR	Cool and light blues to medium and dark blues Tans, blacks, browns, beiges and whites	Light to dark greens, tans, browns, yellows	Grays, blues, whites, browns
TEXTURE	Coarse and smooth to medium	smooth, medium and rough	Course to smooth

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	same as above
LINE	same as above	same as above	same as above
COLOR	same as above	same as above	same as above
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: None

Section E: Viewer Response

<u>Viewer Sensitivity</u>	<u>DURATION OF VIEW</u>	<u>User Volume</u>	<u>OVERALL Response</u>
High	Long	High	High
ADDITIONAL COMMENTS Project is 9.5 miles from Park.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 1, 2013 Evaluated - May 5, 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 17	Latitude / Longitude 21.6759, -157.954	Location Kahuku Hospital and Medical Center
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat and rolling in foreground and middleground. Rugged background	Flat, irregular and rounded	Rectangular buildings and fences, Flat parking lots Vertical poles, turbines and signs. Non directional turbine blades Diagonal and curving conductor lines.
LINE	Horizontal to undulating	Horizontal and vertical and wispy	Bold, geometric, and horizontal Vertical Curving lines
COLOR	Browns, siennas	light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans dark Grays and blacks oranges reds Whites
TEXTURE	Smooth to medium	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

Has PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	Same as above	Additional vertical and angular turbines
LINE	same as above	Same as above	Additional vertical and angular wind turbines
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Short	High	Moderate
ADDITIONAL COMMENTS Scenic Quality is low due to many manmade features. Project is 0.5 miles from Viewpoint.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 2, 2013 Evaluated - May 5, 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 18	Latitude / Longitude 21.6745, -157.952	Location Kahuku Elementary School
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat and rolling in foreground and middleground. Rugged background	Flat, irregular and rounded	Rectangular buildings and fences, Curving road Vertical poles, turbines and signs. Non directional turbine blades Diagonal and curving conductor lines.
LINE	Horizontal to undulating	Horizontal and vertical and wispy	Bold, geometric, and horizontal Vertical Curving lines
COLOR	Browns, siennas	light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans dark Grays and blacks oranges reds Whites
TEXTURE	Smooth to coarse	smooth to rough	Smooth and medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED? ☐ Yes ☒ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	Same as above	Additional angular and vertical turbines
LINE	same as above	Same as above	Additional vertical and angular wind turbines
COLOR	same as above	same as above	Glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Short	High	Moderate
ADDITIONAL COMMENTS Proposed project will co-dominate with existing project. Weak due to existing manmade features.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 2, 2013 Evaluated - May 5, 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 19	Latitude / Longitude 21.6832, -157.945	Location Kahuku Golf Course
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat and rolling in foreground to vertical in middle ground and rugged background	Flat and rolling Angular and rugged	Vertical poles, turbines, non directional blades
LINE	Horizontal to jagged to undulating	Horizontal and rounded Rugged and jagged	Bold Vertical Lines
COLOR	Browns, tans and light greens	light greens to dark greens Yellows, grays, browns	Whites, browns greys
TEXTURE	Smooth and rough to medium	smooth to rough	Smooth

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED? ☒ Yes ☐ No IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Increased number irregular turbine blades
LINE	same as above	same as above	Increased number vertical wind turbines
COLOR	same as above	same as above	Whites
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Moderate

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
High	Short - Rec user	High	Moderate
ADDITIONAL COMMENTS Golfcourse is 1.0 miles from Project Site. There is an existing wind farm in view.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - May 2, 2013 Evaluated - May 5 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 20	Latitude / Longitude 21.6596, -157.933	Location Malaekahana Bike and Pedestrian Path
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat in foreground to rolling in middle ground and rugged background	Flat and rounded Rolling and rugged	Curving Path, horizontal fences, vertical turbines, non directional blades. Highway Rectangular scattered buildings
LINE	Horizontal and rounded to undulating	Horizontal and rounded Rugged	Vertical, horizontal, curving geometric
COLOR	Browns, tans and light greens	light greens to dark greens Yellows, grays, browns, tans, beiges	Whites, browns greys
TEXTURE	Smooth to medium	smooth to medium	Smooth

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED? ☒ Yes ☐ No If YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Increased number turbines
LINE	same as above	same as above	Increased number vertical wind turbines
COLOR	same as above	same as above	Whites and glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE

OVERALL LEVEL OF CONTRAST: Moderate

Section E: Viewer Response

<u>VIEWER Sensitivity</u>	<u>DURATION OF VIEW</u>	<u>User Volume</u>	<u>OVERALL Response</u>
Moderate	High	High	High
ADDITIONAL COMMENTS Path viewpoint location is 1.0 miles from Project.			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - April 22, 2014 Evaluated - May 5 2014	



VISUAL CONTRAST RATING WORKSHEET

Section A: Project Information

Project Name Na Pua Makani	Viewpoint / Photo Point 21	Latitude / Longitude 21.6937, -157.98	Location Kamehameha Highway
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Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
FORM	No water Flat to rolling in middle ground. Rugged background	Flat and rounded Rolling and rugged	Curving road, horizontal fences, rectangular building, prominent vertical poles and non directional blades from wind turbines. Curving conductors
LINE	Horizontal and rounded to undulating	Horizontal and rounded Vertical, angular and wispy Rugged	Geometric, vertical, Turbines. horizontal, curving conductors
COLOR	Browns, tans and light greens	light greens to dark greens Yellows, grays, browns, tans, beiges	Whites, browns grays, blacks, tans, greens, reds yellows,
TEXTURE	Smooth to medium	smooth to coarse	Smooth to medium

Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?

☐

Yes

☒

No

IF YES, FIGURE NUMBER: _____

	LAND / WATER	VEGETATION	STRUCTURES
FORM	same as above	same as above	Additional vertical turbines
LINE	same as above	same as above	Additional turbines
COLOR	same as above	same as above	glaring
TEXTURE	same as above	same as above	same as above

Section D: Contrast Rating

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
ELEMENTS	FORM				✓				✓			✓	
	LINE				✓				✓			✓	
	COLOR				✓				✓			✓	
	TEXTURE				✓				✓				✓

OVERALL LEVEL OF CONTRAST: Weak

Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
Moderate	Short	High	Moderate
ADDITIONAL COMMENTS From highway. 1.6 Miles from the Project. Scenic Quality is Low due to the prominence of an existing wind farm			
EVALUATOR(S) Jennifer D'Avanzo		DATE Picture Taken - April 22, 2014 Evaluated - May 5 2014	